

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE  
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

- 5     1. A seal assembly, comprising:  
      a first body;  
      a second body;  
      a primary seal disposed between the first body and the  
10     second body;  
      a secondary seal disposed between the first body and the  
      second body in spaced relation to the primary seal;  
      a pressure port extending through one of the first body  
      or the second body between the primary seal and the secondary  
15     seal; and  
      means for detecting a pressure increase within the  
      pressure port, thereby indicating a failure of the primary  
      seal.
- 20     2. The seal assembly as defined in Claim 1, wherein the  
      second body is positioned within the first body.
- 25     3. The seal assembly as defined in Claim 2, wherein the  
      second body is a shaft which does one of reciprocates or  
      rotates.
4. The seal assembly as defined in Claim 3, wherein both the  
      primary seal and the secondary seals are annular seals.

5. A seal assembly, comprising:

a first body;

a second body in the form of a shaft disposed within the first body, the shaft being capable of one of reciprocating or rotating;

a primary seal grouping including several annular seals disposed between the first body and the second body;

a secondary seal grouping including several annular seals disposed between the first body and the second body in spaced relation to the primary seal;

a pressure port extending through the first body between the primary seal grouping and the secondary seal grouping; and

a pressure sensor for detecting an increase in pressure within the pressure port, thereby indicating a failure of the primary seal grouping.